A+CLASS™ OCCUPANCY SENSOR WITH INTELLiDAPT DUAL TECH: PASSIVE INFRARED AND ULTRASONIC

FEATURES

- Occupancy Sensor (OS) for A+CLASS™ energy management lighting and control system
- IntelliDAPT self-adaptive technology—no manual adjustment required
- All-digital dual technology (ultrasonic [US] and passive infrared [PIR]) sensor
- Non-volatile memory for sensor settings
- Ceiling Mount
- 500–2,000 square-foot approximate coverage area
- One Occupancy Sensor supplied standard, two optional
- A+CLASS™ Plug-and-Play Quick to Install™ (QTI) connector standard
- Includes 50' of low voltage, color coded plug-and-play CAT5 cable
- UL and cUL listed when ordered as part of a complete A+Class™ System.
- 5-year warranty when ordered as part of the complete A+CLASS™ lighting and controls energy management system

PROJECT INFORMATION

Project Name | Type

Catalog No. | Date

OVERVIEW

The A+CLASS™ APCS-OS occupancy sensor ships standard, one per classroom, as part of the A+CLASS™ energy management lighting and control system. APCS-OS combines ultrasonic (US) and passive infrared (PIR) technologies to turn lighting on and off based on occupancy. This dual technology provides accurate turn-ons while virtually eliminating false-offs. This sensor features patented IntelliDAPT technology, which makes all the sensor adjustments automatically. Throughout the product's lifespan, smart software analyzes the controlled area and makes digital adjustments to sensitivity and timer settings. Occupancy sensors with IntelliDAPT provide a maintenance-free "Install and Forget" operation.

FEATURES AND BENEFITS

IntelliDAPT technology

– Sensor automatically determines the ideal setting for an area

– Excellent false trip immunity (for improved accuracy)

– No manual sensitivity and timer adjustments required

– Provides a maintenance-free "Install and Forget" operation.

All-digital dual technology (ultrasonic [US] and passive infrared

– Superior US minor-motion detection with excellent PIR long [PIR]) sensor range major-motion detection

– Non-volatile memory for sensor settings

– Learned and adjusted settings will not be lost during power outages

– Optional RP flying leads (RP) for connection to HVAC if desired

Plug & Play Quick to Install™ (QTI) connector

– Dramatically reduces installation costs by removing the time consuming process of manually wiring a sensor to a power pack

– Easy to install; fast and efficient; no cutting, stripping, or wire nuts required

A+CLASS™ System Component

When ordered as part of the A+CLASS™ system, 50' of low voltage, color coded CAT5 plug-and-play cable is provided for return to the

Classroom Control Module (CCM).

A+CLASS™ SYSTEM ORDERING INFORMATION

EXAMPLE: APCS-2-277-TLC1-02-DDZ2

APCS - ___ - ___ - ___ - ___ - ___ - ___ - ___

NO. OF ROWS

2	Two
3	Three
4	Four

VOLTAGE

120	120V
277	277V

SYSTEM

APCS	A+CLASS

TEACHER STATION

TLC	General, AV, Study Time
AVD	General, AV Dimming, Study Time[1, 2, 3]
GDM	General (manually dimmed), AV, Study Time[1, 2, 3]
AGD	General (manually dimmed), AV (manually dimmed), Study Time[1, 2, 3]
TCU	Custom Teacher Station (contact factory to specify switches)

NO. OF TEACHER STATIONS

1	One (Std.)
2	Two

WHITEBOARD

Blank	No whiteboard lighting control
WT	Whiteboard lighting switch included with Teacher Station[4]
WS	Independent whiteboard lighting switch (not in teacher station)
WCU	Custom Whiteboard Station

MANUAL CONTROL AT ENTRY

Blank	One master on/off switch control for all rows and whiteboard
NA	No master or row controls supplied
MC01	One master on/off switch control for all rows and whiteboard
MC02	Two master on/off switch controls for all rows and whiteboard (for dual entry/exit points)[2]
RC	One set of on/off independent row switch controls (one switch per row)
RC2	Two sets of on/off independent row switch controls (one switch per row) (for dual entry/exit points)[2]
MRC	One master on/off switch control for all rows and white board and one set of on/off independent row switch controls (one switch per row)
MRC2	Two master on/off switch controls for all rows and whiteboard and two sets of on/off independent row switch controls (one switch per row) (for dual entry/exit points)[2]
MCU	Custom Master/Row Control Station
MCU2	Two Identical Custom Master/Row Control Stations

DAYLIGHT SENSOR AND CONTROL

Blank	None
DD	Daylight Dimming: Daylight sensor for dimming general mode[1, 2]
DS	Daylight Switching: Daylight sensor for switching general mode off when daylight is sufficient[2]

OCCUPANCY SENSOR

Blank	One Occupancy Sensor
O2	Two Occupancy Sensors[2]
RP	One Ceiling Mount Occupancy Sensor with RP flying leads
RP02	Two Ceiling Mount Occupancy Sensors with RP flying leads
OCU	Custom Selected Occupancy Sensor (specify)

ROOM NO.

_	Type Mark (Max 10 characters. Will appear on separate line of order and label.)

DAYLIGHT ZONES

Blank	None
Z1	Row nearest the window[2]
Z2	2 Rows nearest the window[2]
Z3	3 Rows nearest the window[2]
Z4	4 Rows nearest the window[2]

[1] Requires 0-10V dimming ballast in lighting fixture.
[2] Includes additional plug & play cable.
[3] Adds Raise/Lower dimming switch to TLC. 3-gang switch station consists of General/ A/V switch, Raise/Lower switch, Study Time switch.
[4] WT when used with 2 Teacher Stations will control one whiteboard from 2 locations.

ORDERING

When ordered as part of the APCS system, the APCS-OS will ship with one 50' CAT5 color coded low voltage plug-and-play cable per occupancy sensor (one Occupancy Sensor supplied standard, two optional).

The full APCS system includes lighting and controls for a typical classroom application. See the ordering guide for APCS control; lighting selections are found at www.aleralighting.com and are ordered as a separate line item as part of the APCS package.

IntelliDAPT Dual Technology with LED Indicator

Auto reset from test setting. Self-adjusting timer. Self-adjusting ultrasonic and passive infrared thresholds. Automatic false-on/false-off corrections. Ultrasonic (US) output of 32kHz.Passive infrared (PIR) dual element pyrometer and 12-element cylindrical rugged lens. LED lamp colors provide visual cues indicating occupancy detection method. Red indicates infrared detection. Green indicates ultrasonic motion.

Timer timeout

Automatic mode: 8–30 min. (self-adjusts based on occupancy)

– Test mode: 8 seconds (for an easy check at installation)

Coverage, Power and Signal

Coverage area of approximately 2,000 square feet. Power input 24 VDC, 33 mA . Power is provided through A+CLASS™ low voltage color coded plug-and-play cable; no line or low voltage additional wiring is required for standard classroom applications.

Output is 24 VDC active high-logic control signal with short circuit protection

Operation

APCS-OS is for Indoor use only. Operating temperature: 32o–104o F (0o–40o C). Relative humidity (non-condensing): 0%–95% Recommended MAX mounting height of 12ft.

Construction

4.5" diameter, 1.5" height (114 mm diameter, 38mm height). 5.0 oz (142g) weight. Attractive, neutral off white color.

Rugged casing, high-impact, injection-molded plastic KJB ABS Cycolac (UL-945VA) flame class rating, UV inhibitors. Mounting base provided.

– Quick-To-Install TM wiring standard. Ships with all required components when ordered as part of the A+CLASS™ system, including but not limited to 50' of color coded, low voltage, plug and play CAT5 cable for return to the A+CLASS™ CCM (Classroom Control Module)

Certifications and Warranty

UL and cUL listed with 5 year warranty when purchased as part of the A+CLASS™ energy management classroom lighting and control system

Test Date 7/14/00